

Europäisches Patentamt  
European Patent Office  
Office européen des brevets



(11) EP 0 665 670 A3

(12) EUROPEAN PATENT APPLICATION

(88) Date of publication A3:  
27.03.1996 Bulletin 1996/13

(51) Int Cl.<sup>6</sup>: H04L 29/06

(43) Date of publication A2:  
02.08.1995 Bulletin 1995/31

(21) Application number: 95300247.4

(22) Date of filing: 16.01.1995

(84) Designated Contracting States:  
DE FR GB

(30) Priority: 14.01.1994 US 182969

(71) Applicant: TRAVELING SOFTWARE, INC.  
Bothell, WA 98011 (US)

(72) Inventor: Pyne, Charles F.  
Norfolk, Massachusetts 02056 (US)

(74) Representative: Lawrence, Malcolm Graham  
Hepworth, Lawrence, Bryer & Bizley  
Merlin House  
Falconry Court  
Bakers Lane  
Epping Essex CM16 5DQ (GB)

(54) Remote file transfer method and apparatus

(57) Remote file transfer applications often involve a situation where a receiving computer (22) contains a reference file (48) that may be similar, or perhaps even identical to, a source file (46) to be transmitted by a sending computer (20). Disclosed is a file transfer method that identifies and isolates the differences between the two files, and transmits only those differences to the receiving computer. The method divides the data in the reference file into a plurality of blocks and associates each block of data with a key value. The key values are then sent to the sending computer in the form of an array. At the sending computer, a block of data at the source file is identified, its key value computed, and the key value is then compared to the keys in the array. If a match is found, an indication of such is sent to the receiving computer. Otherwise, a byte of data from the data block is sent to the receiving computer, and a subsequent block of data is identified and analyzed. The latter steps of the method are repeated until a representation of the source file is present at the receiving computer.

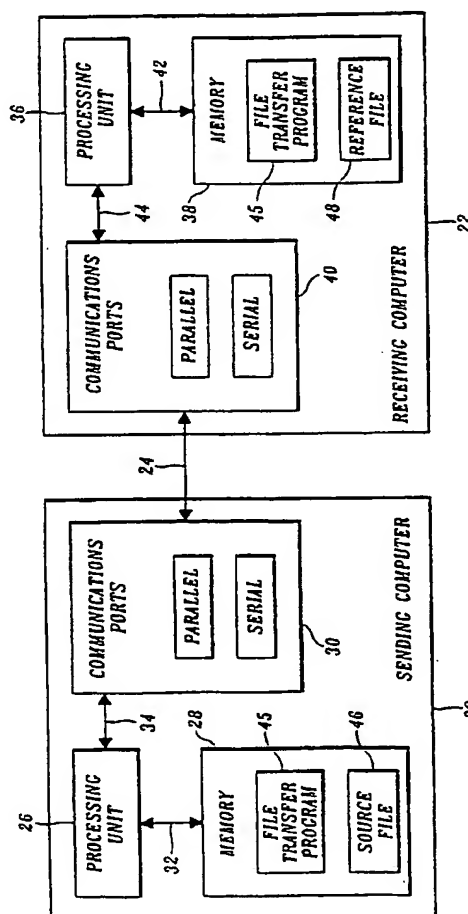


Fig. 1.



European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 95 30 0247

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
A	WO-A-91 02313 (IBM) * abstract * * claim 1 *	1-15	H04L29/06
A	EP-A-0 541 281 (ATT) * abstract * * claims 1-3 *	1-15	
P,X	WO-A-94 23377 (SQUIBB DATA SYSTEMS, INC.) * page 7, line 14 - page 9, line 16 *	1,13	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			H04L G06F
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
THE HAGUE		19 January 1996	Canosa Areste, C
<p><b>CATEGORY OF CITED DOCUMENTS</b></p> <p>X : particularly relevant if taken alone  Y : particularly relevant if combined with another document of the same category  A : technological background  O : non-written disclosure  P : intermediate document</p> <p>T : theory or principle underlying the invention  E : earlier patent document, but published on, or after the filing date  D : document cited in the application  L : document cited for other reasons  &amp; : member of the same patent family, corresponding document</p>			

EPO FORM 1501/91 (P4/C3)